Name:……Stream……

Signature:……

545/1

CHEMISTRY

THEORY

Paper 1

2 hours

Uganda Certificate of Education

RESOURCEFUL MOCK

CHEMISTRY THEORY

Paper 1

2hrs

INSTRUCTIONS TO CANDIDATES

*This paper consists of **two sections**; **A** and **B**. It has **six** examination items. **Section A** has two compulsory **items**. **Section B** has **two Parts; I** and **II**. Answer **one** item from each **part.** Answer **four items** in **all**.*

*Answers to **Section A** must be written in the spaces provided while those of **Section B** must be written on the answer booklet(s) provided.*

Any additional item(s) answered will not be scored.

SECTION A

*Answer **all** items in this section*

Item 1

Dan and mike were both suffering from a sickness; Josh was also feeling headache in addition to the sickness. On diagnosis from the clinic, both were found to be suffering from a certain bacterial infection. Both were prescribed streptomycin in addition to aspirin however, none of them bought aspirin since they didn't have enough money. On taking streptomycin after 6 hours, Dan healed completely while Mike remained feeling headache with the bacterial infection no more.

Task;

As a chemistry learner:

(a) What category of medicine did they prescribe to Dan and Mike?

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(b) Help Dan and Mike to understand how the medicine works

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(c) Advise Dan and Mike on the challenges associated with the long term use of the medicine.

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(d) Guide Mike on how to get better medication.

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Item 2

The local government of Nakaseke, Uganda, laid off some employees during the COVID-19 lockdown. The laid off employees pooled their resources and established a food processing factory. They want to use environmentally friendly and sustainable packing materials.

They know that choosing the right material depends on the nature of the material and have come to you for advice as a chemistry student.

TASK,

As a chemistry learner,

(a) Advice the employees on;

(i) The nature of the material to use

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(ii) The suitability of the material they are to use.

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(b) Take the employees through the challenges associated with the long use of the material.

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SECTION B

PART I

*Answer **one** item in this part*

Item 3

Rushekye hills in Kisoro district Uganda is found to contain Significant iron deposits. A foreign investor wants to setup an iron and steel rolling factory to tap into the opportunity. The parliament is debating about the project. However, they seem not to understand how iron can be obtained from its raw materials and consequently its benefits.

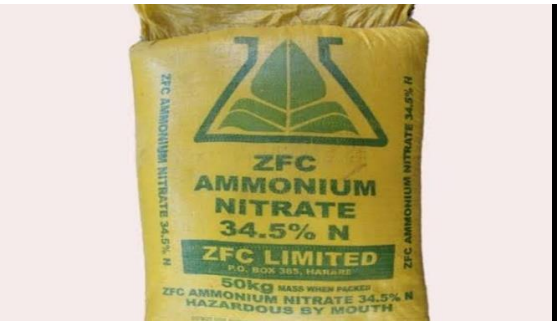
As a **SENIOR FOUR** candidate with the knowledge of chemistry, the members are confident that you can provide the necessary information.

TASK

Write a presentation you will use upon invitation.

Item 4

The results from National Agricultural Research Organisation have revealed that ammonium nitrate fertilizer is one of the most effective Nitrogen rich fertilizer to Uganda farmers. The government has cleared an investor to set up a Urea production plant in Namanve industrial park with minimal environmental impact. However, the investor seems to have scanty knowledge about the production process.



The investor as sought your assistance confident that you will be of help to him.

TASK

As a chemistry learner, put in writing whatever will help the investor.

PART II

*Answer **one** item in this part*

Item 5

The National Environmental Management Authority (NEMA) in Uganda is gearing up to sensitize citizens about the importance of conserving natural resources, particularly focusing on the impact of human activities on fossil fuels, in honor of World Environment Day.

As a science student in secondary school, you've been given the role of organizing a special assembly to educate the fellow students about the significance of fossil fuels and the importance of their conservation.

TASK

As a chemistry student write a relevant piece of information you will use on the assembly.

Item 6

In Uganda, there are many mineral reserves and rocks. Due to the rapid population growth their exploitation is causing proportional environmental degradation. Government through media houses wants to make public awareness on the matter.

Your school has been chosen to lead the environmental conservation project in your district on the theme "**EXPLOITAION OF ROCKS AND MINERALS IS A NECESSARY EVIL."** As a chemistry student, you have been chosen to present on one of the radio talks shows.

TASK

write down the information which can be conveyed.

END